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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/694,451 | 10/27/2003 | Balasubramanian Ramachandran | SK990003C1 | 8905 |
| 34408 | 7590 | 10/28/2005 | | |
| THE ECLIPSE GROUP 10605 BALBOA BLVD., SUITE 300 GRANADA HILLS, CA 91344 | | | EXAMINER GELIN, JEAN ALLAND | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2688 | |

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,451

Applicant(s)

RAMACHANDRAN,
BALASUBRAMANIAN

Examiner

Jean A. Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 25-27 and 64 is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-19, 21-24, 28-30, 34-36, 38-42, 46-48, 52-54, 59 is/are rejected.
- 7) ☒ Claim(s) 14-16, 20, 31-33, 37, 43-45, 49-51, 55-58 and 60-63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Applicant's amendments filed on August 23, 2005 in which claims 1-64 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 12, 28, 29, 42, 46-48, 52-54, and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Samson (US 5,590,402).

Regarding to claims 11, 28, and 42 Samson teaches a multi-mode transmitter system comprising: a mode selector for selecting a mode of operation of a transmitter (i.e. mode select signal 106, col. 2, lines 29-40); and a controller that adjusts the operating current of at least part of the transmitter responsive to the mode selector (i.e. A microprocessor used to control transmitter, col. 2, lines 35-67).

Regarding to claims 12, 29, Samson teaches the mode selector is configured to select a mode responsive to a command received over a user interface (i.e. manually adjust the dual-mode transmitter, col. 1, lines 41-50).

Regarding to claims 46, 47, 52, and 53, Samson teaches applying the operating current to at least part of the transmitter or a radio frequency front-end of the transmitter

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(i.e. varying deviation level is equivalent to varying power of the transmitter, col. 2, lines 30-65).

Regarding to claims 48, 54, and 59, the claims are interpreted and rejected for the same reason as set forth in the rejection of claim 11 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13, 17-19, 21, 22, 24, 30, 34-36, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samson in view of Tomick et al. (US 6,317,607).

Regarding to claims 13, 30, Samson teaches all the limitations above wherein the mode selector is configured to select a mode from the following group: voice transmission, data rate transmission.

However, the preceding limitation is very well known in the art of communications, as evidenced by Tomcik. Tomcik teaches selecting a mode of communication in a multi-mode wireless communication system to identify the preferred mode of communication (col. 2, lines 50-65). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have implemented the techniques of Tomcik within the system of Samson in order to avoid interruptions from other calls while the telephone is engaged in certain mode of communication.

Regarding to claims 17, 18, 34, and 35 Samson teaches all the limitations above except the transmitter is a spread spectrum also called a code division multiple access transmitter.

However, code division multiple access, also called spread spectrum, is a name for a new form of digital cellular phone service. Tomcik teaches that in voice communication mode, audio information is transmitted using wireless communication modulation techniques such as CDMA (col. 5, lines 15-45). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have implemented the wireless communication modulation techniques such as CDMA within the system of Samson in order to increase the system capacity and more efficiently use the spectrum.

Regarding to claims 19, 36, Samson in view of Tomcik inherently teaches the transmitter has a radio frequency front-end and the controller is configured to dynamically determine the operating current for at least part of the radio frequency front end (col. 28-67):

Regarding to claims 21, 22, 24, 38, 39, 41, Samson teaches all the limitations above except wherein the system is a communication device which is a mobile unit.

However, the preceding limitation is very well known in the art of communications, as evidenced by Tomcik. Tomcik teaches assigning a multi-mode wireless device such as wireless devices 100n to each user to access the communication system (col. 4, lines 1-28). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have implemented the

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techniques of Tomcik within the system of Samson in order for the user of the wireless communication device to select his preferred communication mode.

6. Claims 13, 17-19, 21, 22, 24, 30, 34-36, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samson in view of Tomick et al. (US 6,317,607) further in view of Chen et al. (US 6,373,823).

Regarding to claims 23, 40, Samson in view of Tomcik teaches all the limitations above except that the desired transmit power of the transmitter is determined by a base station in communication with the mobile unit and exercising closed loop power control over the mobile unit.

However, the preceding limitation is very well known in the art of communications, as evidenced by Chen. Chen teaches, in closed loop power control, the power control commands consist of a series of one bit up/down commands to which base station responds by increasing or decreasing the transmission energy of forward link signal (col. 4, lines 14-35). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have implemented the techniques of Chen within the system of Samson and Tomcik in order for the base station to continue transmitting at the current transmission energy of forward link signals when base station does not respond to power control command from mobile station.

Allowable Subject Matter

7. Claims 1-10, 25-27, and 64 are allowed.

8. Claims 14-16, 20, 31-33, 37, 43-45, 49-51, 55-58, and 60-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

9. The following is an examiner's statement of reasons for allowance: the prior art teaches a dual mode transmitter which transmit signals of varying deviation levels in communication systems and adjusting the voice deviation based on the transmitter mode.

On the other hand, the Applicant teaches and a controller that adjusts the operating current of at least part of the multi-mode transmitter responsive to the mode selector, the controller further including first, second, and third sub-modules, wherein the first sub-module is configured to determine a base linearity responsive to the selected mode, where the base linearity is responsive to a crest factor associated with the selected mode, the second sub-module is configured to adjust the base linearity responsive to a desired transmit power, and the third sub-module is configured to determine the operating current responsive to the adjusted base linearity. These limitations, in conjunction with all the limitations of the independent and dependent claims, have not been disclosed, taught or made obvious over the prior art of record.

The prior art of record considered alone or in combination neither anticipates nor renders obvious wherein the radio frequency front-end of the spread spectrum transmitter includes an ultra high frequency mixer and a pre-driver amplifier, and the controller is configured to dynamically determine the operating current of the ultra high frequency mixer and the pre-driver amplifier, in conjunction with all the limitations of the independent and dependent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of reasons for Allowance."

Response to Arguments

10. Applicant's arguments filed 08/23/05 have been fully considered but they are not persuasive.

As per claims 11 28, and 42, the Applicant argues that Samson does not teach a mode selector for selecting a mode of operation of a transmitter but does teach a mode select signal; also Samson does not teach a controller that adjust the operating current of at least part of the transmitter responsive to the mode selector. However, the Examiner disagrees with the preceding argument. Samson inherently teaches a device performing the function of switching (corresponding to mode selector) the transmitter from wideband to narrowband. The device coupled to a microprocessor controls the transmitter, and includes means to attenuate or amplify the deviation level when the transmitter changes from wideband to narrowband and vice versa (corresponding to adjusting the operating current) (see rejection above). Therefore, the Examiner maintains the rejection, and it is final.

As per claims 12 and 29, the Applicant argues that Samson fails to teach select mode over the user interface. However, the Examiner disagrees with the preceding

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argument because Samson teaches in col. 1, manual adjustments between the wideband and narrowband.

As per claims 48, 54, and 59, the Applicant argues that the claims are allowable over Samson for the same reasons that are set forth with regard to claims 11, 28, and 42. Therefore, the Examiner maintains the rejection for the same reason set forth in the arguments above.

The Applicant argues claims 46 and 47 are allowable because they depend from allowable claims 42, 52, 53, and 48 directly or indirectly. However, the rejections of claims 42, 52, 53, and 48 are maintained. Therefore, claims 46 and 47 are rejected for the same reasons.

The Applicant argues claims 13, 17-19, 21, 22, 24, 30, 34-36, 39, and 41 are allowable because they include the limitations of independent claims 11 and 28. Given that claims 11 and 28 are rejected, therefore the rejection of claims 13, 17-19, 21, 22, 24, 30, 34-36, 39, and 41 are maintained.

The status of claims 1-64 remains the same as recited in the previous Office Action, and the rejections are final.

The Terminal Disclaimer filed 8/23/05 has been entered in the application file.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

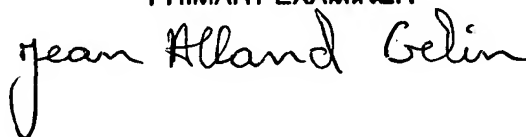
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGelin
October 22, 2005

JEAN GELIN
PRIMARY EXAMINER

A handwritten signature in cursive script that reads "jean Allard Gelin". The signature is written in black ink and is positioned below the printed name and title of the examiner.